

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86104

June-20-12 2:50:50 PM

86104

Page 2

Item ID: D3302-3

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Doubler

Stop ***NS2***

Start Date: 20/06/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 04/07/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

Small Fab

n/a

Small Fab

Memo

0.00

Small Fab

Deburr break all unmarked sharp edges 0.005 to 0.010

140

0.00

140

NC BRAKE

(4)

Brake NC

Memo

0.00

Brake NC

Form as per Dwg D3302

8/12/06/28

150

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.00

Quality Control

Schloed-79

(4)

W/O:		WORK ORDER CHANGES					
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Work Order ID 86104

86104

Page 3

June-20-12 2:50:50 PM

Item ID: D3302-3

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Doubler

Start Date: 20/06/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 04/07/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Chemical Conversion Coat per QSI005 4.1	0.00				4	7/6	12-7-3	
160									
HandFinish	Memo	0.00							
Hand Finishing									
170	QC3- Inspect Part Finish	0.00							
170									
QC	Memo	0.00							
Quality Control									
180	Identify as per dwg & Stock Location: ST 198	0.00							
180									
Packaging	Memo	0.00							
Packaging									

12/7/3 (4)

4x 60 12-7-3.

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Work Order ID 86104***86104***

Page 4

June-20-12 2:50:50 PM

Item ID: D3302-3

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Doubler

Start Date: 20/06/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 04/07/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

12/7/4
W/12-07-H

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

June-20-12 2:50:55 PM

Page 1

Work Order ID: 86104

86104

Parent Item: D3302-3

D3302-3

Parent Item Name: Doubler

Start Date: 20/06/2012

Required Date: 04/07/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP A04.09.02New issueKJ/JLM
IPP B06.05.02Water jet EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased			No	100	sf	541.5468	0.9931	4.181474			

M6061T6S 063

6061-T6 .063 Sheet

**

Sum 12-6-24

Location

Loc Qty

Loc Code

MAT021

541.5468320

113608

0

116308

5.01556842

117285

67.544

119331

44.2

119802

5.94

120218

17.88

120866

66.1026316

121805

334.864632

121805

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

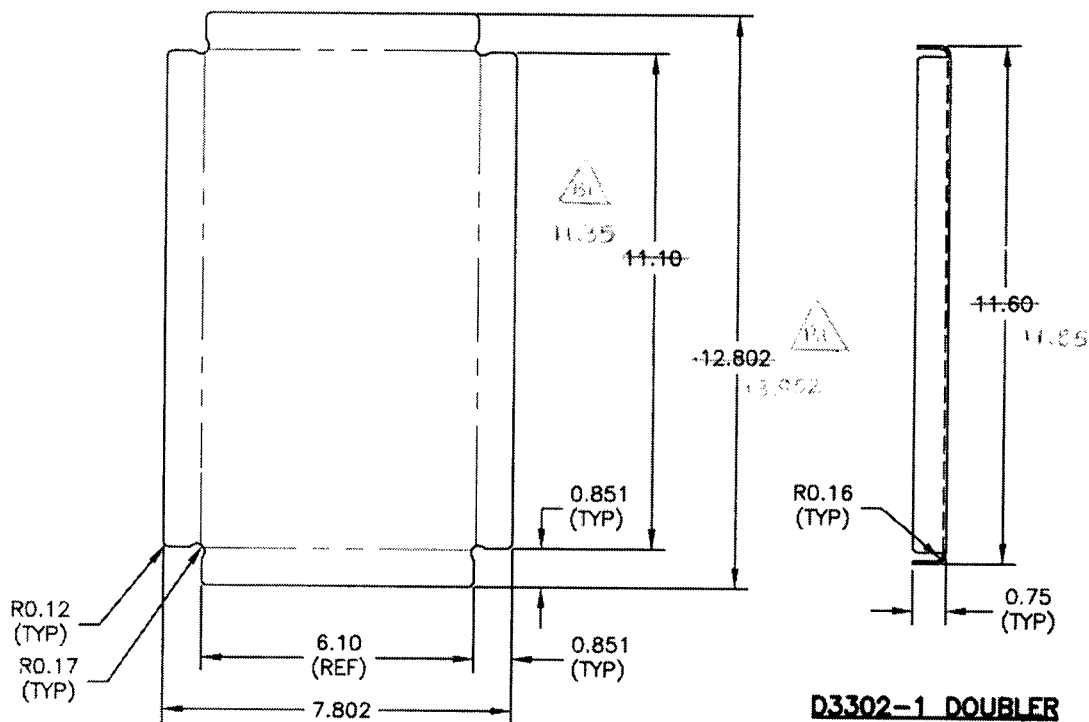
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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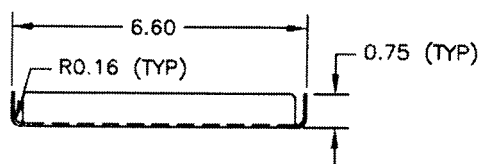
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CHECKED H	APPROVED H	DRAWING NO. D3302	REV. B SHEET 1 OF 4
DATE 04.11.18	TITLE DOUBLER		SCALE 1:4
A	04.07.06	NEW ISSUE	
B	04.11.18	REMOVE HOLES	
B1	04.12.15	ADDED 0.25" TO THE LEAVE FOR -1/-3	
B2	05.05.21	7.25 WAS 7.34; 8.952 WAS 7.042; 7.75 WAS 7.84 FOR D3100-3	

RELEASED
04.11.23



D3302-1 FLAT PATTERN

D3302-1 DOUBLER
BEND DETAIL



D3302-1 NOTES:

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO DELAY MTS
12/06/20

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

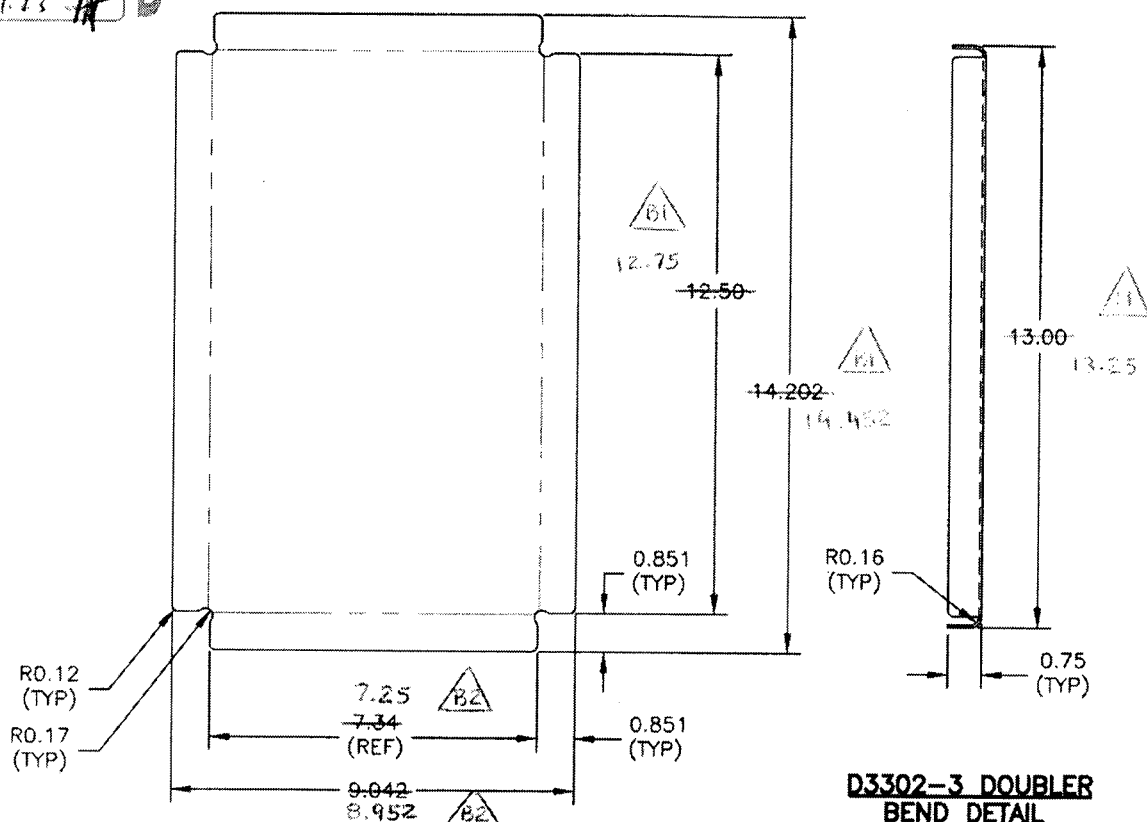
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

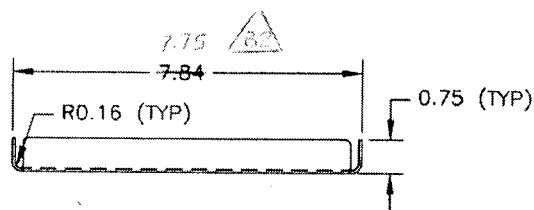


DESIGN JA	DRAWN BY JA	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3302	REV. B SHEET 2 OF 4
DATE 04.11.18		TITLE DOUBLER	SCALE 1:4

RELEASED
04.11.18



D3302-3 FLAT PATTERN



D3302-3 NOTES:

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & BATCH USING FINE POINT PERMANENT MARKER

86108

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

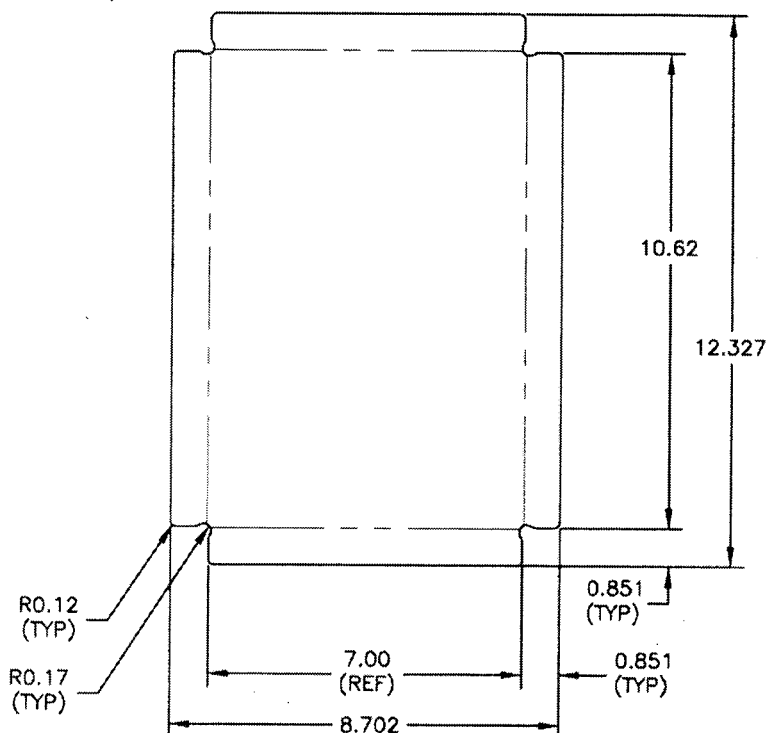
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

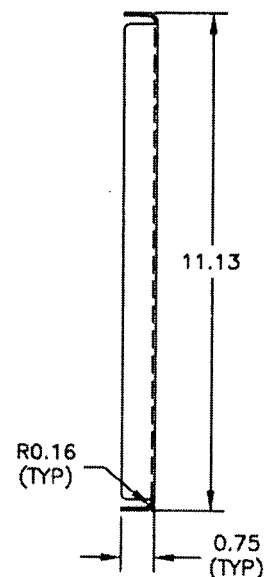


DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3302	REV. B SHEET 3 OF 4
DATE 04.11.08		TITLE DOUBLER	SCALE 1:4

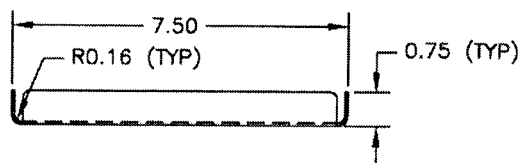
RELEASED
04 11 23



D3302-5 FLAT PATTERN



**D3302-5 DOUBLER
BEND DETAIL**



D3302-5 NOTES:

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

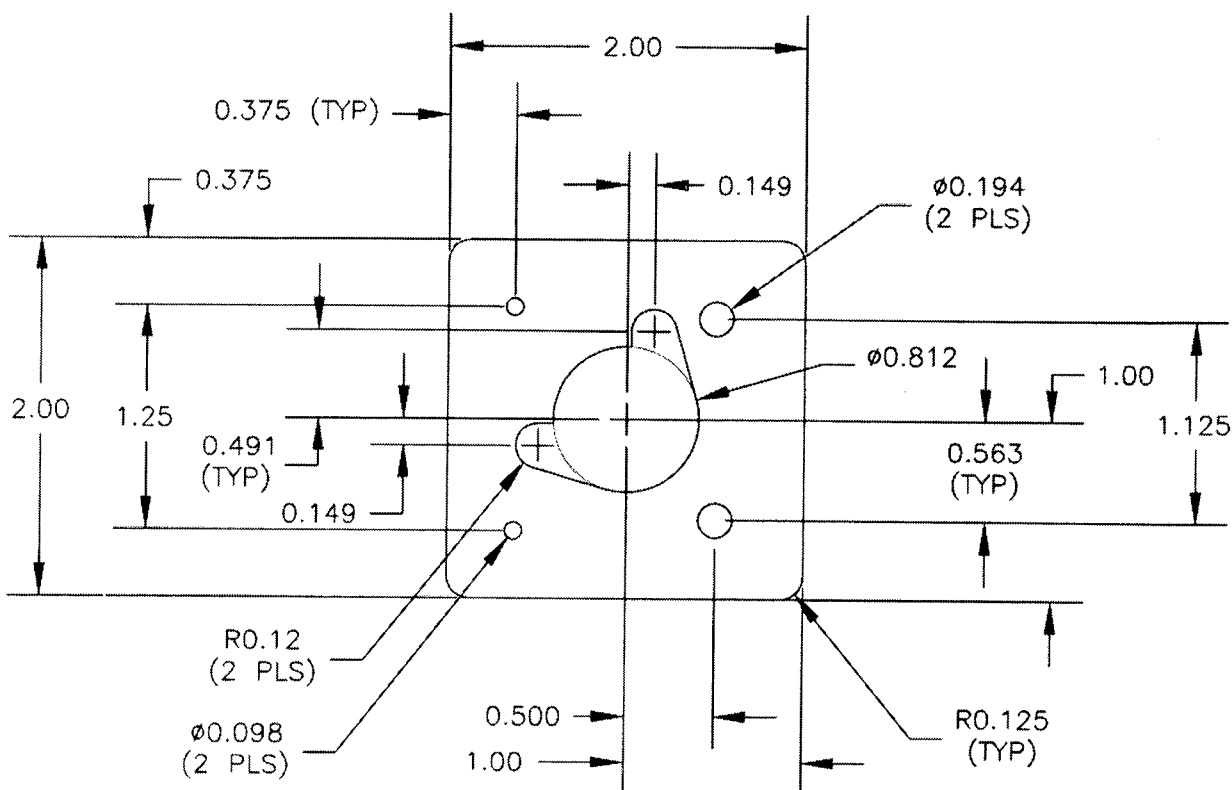
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3302	REV. B SHEET 4 OF 4
DATE 04.11.18		TITLE DOUBLER	SCALE 1:1

RELEASED
04.11.18



D3302-7

D3302-7 NOTES:

- 1) MATERIAL: 5052-H32 OR 6061-T6 (QQ-A-250/8 OR QQ-A-250/11)
0.040 THICK (REF. DART SPEC. M5052H32S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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